

CLAIMS

1. A loudspeaker enclosure comprising:

a base panel having a front surface and a back surface opposite thereof and a first side and a second side forming a base perimeter, said base panel having a first base mounting feature and a second base mounting feature opposite thereof and proximate said base perimeter, said base panel having a first groove and a second groove opposite thereof and proximate said base perimeter, wherein said base panel is defined by a set of contiguous layers, said plurality of contiguous layers including a first base layer, a second base layer, and a third base layer consecutively layered, wherein said first base layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said second base layer, is selected from the group consisting of a foam material and an expanded polystyrene, and wherein said third base layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

a first side panel configured to attach to said base panel, said first side panel having a front surface and a back surface opposite thereof and a first side and a second side forming a first side panel perimeter, said first side panel having a first side panel first mounting feature and a first side panel second mounting feature opposite thereof and proximate said first side panel perimeter, said first side panel having a first side panel first groove and a first side panel second groove opposite thereof and proximate said first side panel perimeter,

wherein said first side panel is defined by a plurality of contiguous layers, said plurality of contiguous layers including a first side panel layer, a second side panel layer, and a third side panel layer consecutively layered, wherein said first panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said second side panel layer is selected from the group consisting of a foam material and an expanded polystyrene, and wherein said third side panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

a second side panel configured to attach to said base panel, said second side panel having a front surface and a back surface opposite thereof and a first side and a second side forming a second side panel perimeter, said second side panel having a second side panel first mounting feature and a second side panel second mounting feature opposite thereof and proximate said second side panel perimeter, said second side panel having a second side panel first groove and a second side panel second groove opposite thereof and proximate said second side panel perimeter, wherein said second side panel is defined by a plurality of contiguous layers, said plurality of contiguous layers including a fourth side panel layer, a fifth side panel layer, and a sixth side panel layer consecutively layered, wherein said fourth side panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said fifth side panel layer is selected from the group consisting of a foam material

and an expanded polystyrene, and wherein said sixth side panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

a top panel configured to attach to said first side panel and said second side panel, said top having a front surface and a back surface opposite thereof and a first side and a second side forming a top panel perimeter, said top panel having a top panel first mounting feature and a top panel second mounting feature opposite thereof and proximate said top panel perimeter, said top panel having a top panel first groove and a top panel second groove opposite thereof and proximate said top panel perimeter, wherein said top panel is defined by a plurality of contiguous layers, said plurality of contiguous layers including a first top layer, a second top layer, and a third top layer consecutively layered, wherein said first top layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said second top layer is selected from the group consisting of a foam material and an expanded polystyrene, and wherein said third top layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

a front panel having a front surface and a back surface opposite thereof, said front panel configured to attach to said base panel, said first side panel, said second side panel, and said top panel, said front panel defining at least one loudspeaker opening configured to receive a loudspeaker; and

a rear panel having a front surface and a back surface opposite thereof, said rear panel configured to attach to said base panel, said first side panel, said second side panel, and said top panel.

2. The loudspeaker enclosure of Claim 1, wherein said base panel first mounting feature, said base panel second mounting feature, said top panel first mounting feature, and said top panel second mounting feature are female receiving members.

3. The loudspeaker enclosure of Claim 2, wherein said first side panel first mounting feature, said first side panel second mounting feature, said second side panel first mounting feature, and said second side panel second mounting feature are configured to mountably insert into said female receiving members.

4. The loudspeaker enclosure of Claim 1, wherein dado joints are formed when said first side panel attaches to said base panel and to said top panel.

5. The loudspeaker enclosure of Claim 1, wherein dado joints are formed when said second side panel attaches to said base panel and to said top panel.

6. The loudspeaker enclosure of Claim 1, wherein an adhesive is utilized to join said base panel, said first side panel, said second side panel, said top panel, said front panel and said rear panel to form said loudspeaker enclosure.

7. The loudspeaker enclosure of Claim 1, wherein said first base layer, said first side panel layer, said fourth side panel layer, and said first top layer are selected from the group consisting of about 1 to about 3 millimeters plywood, about 1 to about 3 millimeters wood composition material, about 1 to about 3 millimeters pressboard, about 1 to about 3 millimeters plastic, and about 1 to about 3 millimeters fiberglass.

8. The loudspeaker enclosure of Claim 1, wherein said second base layer, said second side panel layer, said fifth side panel layer, and said second top layer are selected from the group consisting of a foam material and an expanded polystyrene.

9. The loudspeaker enclosure of Claim 1, wherein said third base layer, said third side panel layer, said sixth side panel layer, and said third top layer are selected from the group consisting of about 1 to about 3 millimeters plywood, about 1 to about 3 millimeters wood composition material, about 1 to about 3 millimeters pressboard, about 1 to 3 millimeters plastic, and about 1 to about 3 millimeters fiberglass.

10. The loudspeaker enclosure of Claim 1, wherein said rear panel is defined by a plurality of contiguous layers.

11. A method of manufacturing a loudspeaker enclosure comprising:

providing a base panel having a front surface and a back surface opposite thereof and a first side and a second side forming a base perimeter, said base panel having a first base mounting feature and a second base mounting feature opposite thereof and proximate said base perimeter, said base panel having a first groove and a second groove opposite thereof and proximate said base perimeter, wherein said base panel is defined by a set of contiguous layers, said plurality of contiguous layers including a first base layer, a second base layer, and a third base layer consecutively layered, wherein said first base layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said second base layer, is selected from the group consisting of a foam material and an expanded polystyrene, and wherein said third base layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

attaching to said base panel a first side panel having a front surface and a back surface opposite thereof and a first side and a second side forming a first side panel perimeter, said first side panel having a first side panel mounting feature and a first side panel second mounting feature opposite thereof and proximate said first side panel perimeter, said first side panel having a first side

panel first groove and a first side panel second groove opposite thereof and proximate said first side panel perimeter, said first side panel first mounting feature interlocks with said first base mounting feature, wherein said first side panel is defined by a plurality of contiguous layers, said plurality of contiguous layers including a first side panel layer, a second side panel layer, and a third side panel layer consecutively layered, wherein said first panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said second side panel layer is selected from the group consisting of a foam material and an expanded polystyrene, wherein said third side panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

attaching to said base panel a second side panel, said second side panel having a front surface and a back surface opposite thereof and a first side and a second side forming a first side panel perimeter, said second side panel having a second side panel first mounting feature and a second side panel second mounting feature opposite thereof and proximate said second side panel perimeter, said second side panel having a second side panel first groove and a second side panel second groove opposite thereof and proximate said second side panel perimeter, said second side panel first mounting feature interlocks with said second base mounting feature, wherein said second side panel is defined by a plurality of contiguous layers, said plurality of contiguous layers including a fourth side panel layer, a fifth side panel layer, and a sixth side panel layer

consecutively layered, wherein said fourth side panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said fifth side panel layer is selected from the group consisting of a foam material and an expanded polystyrene, and wherein said sixth side panel layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

providing a top panel configured to attach to said first side panel and said second side panel, said top having a front surface and a back surface opposite thereof and a first side and a second side forming a top panel perimeter, said top panel having a top panel first mounting feature and a top panel second mounting feature opposite thereof and proximate said top panel perimeter, said top having a top panel first groove and a top panel second groove opposite thereof and proximate said top panel perimeter, wherein said top panel is defined by a plurality of contiguous layers, said plurality of contiguous layers including a first top layer, a second top layer, and a third top layer consecutively layered, wherein said first top layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass, wherein said second top layer is selected from the group consisting of a foam material and an expanded polystyrene, and wherein said third top layer is selected from the group consisting of plywood, wood composition material, pressboard, plastic, and fiberglass;

attaching a front panel having a front surface and a back surface opposite thereof to said first base panel groove, to said first side panel first groove,

and to said second side panel first groove, said front panel defining at least one loudspeaker opening configured to receive a loudspeaker;

attaching a rear panel having a front surface and a back surface opposite thereof to said second base panel groove, to said first side panel second groove, and to said second side panel second groove; and

attaching said top panel to said first side panel second mounting feature via said top panel first mounting feature, to said second side panel second mounting feature via said top panel second mounting feature, to said front panel via said top panel first groove, and to said rear panel via said top panel second groove, said attaching said top panel defines an interior and an exterior of the loudspeaker enclosure.

12. The method of Claim 11, wherein said base panel first mounting feature, said base panel second mounting feature, said top panel first mounting feature, and said top panel second mounting feature are female receiving members.

13. The method of Claim 12, wherein said first side panel first mounting feature, said first side panel second mounting feature, said second side panel first mounting feature, and said second side panel second mounting feature configured to mountably insert into said female receiving members.

14. The method of Claim 11, wherein dado joints are formed when said first side panel attaches to said base panel and to said top panel.

15. The method of Claim 11, wherein dado joints are formed when said second side panel attaches to said base panel and to said top panel.

16. The method of Claim 11, further comprising:
applying an adhesive to join said base panel, said first side panel, said second side panel, said top panel, said front panel, and said rear panel for forming said loudspeaker enclosure.

17. The method of Claim 11, wherein said first base layer, said first side panel layer, said fourth side panel layer, and said first top layer are selected from the group consisting of about 1 to about 3 millimeters plywood, about 1 to about 3 millimeters wood composition material, about 1 to about 3 millimeters pressboard, about 1 to about 3 millimeters plastic, and about 1 to about 3 millimeters fiberglass.

18. The method of Claim 11, wherein said second base layer, said second side panel layer, said fifth side panel layer, and said second top layer are selected from the group consisting of a foam material and an expanded polystyrene.

19. The method of Claim 11, wherein said third base layer, said third side panel layer, said sixth side panel layer, and said third top layer are selected from the group consisting of about 1 to about 3 millimeters plywood, about 1 to about 3 millimeters wood composition material, about 1 to about 3 millimeters pressboard, about 1 to 3 millimeters plastic, and about 1 to about 3 millimeters fiberglass.